

Request for Quote

Commonwealth Reference	CGE modelling	Request Open: 14/12/2018	Request Close: 02/01/2018
Service Category	Economic and Financial Analysis		
Services Required	<p>1. Objective and approach</p> <p>The Department of Industry, Innovation and Science is seeking services to examine how different emissions reduction scenarios impact the resources and minerals manufacturing sectors through a CGE modelling exercise.</p> <p>2. Project scope</p> <p>2.1 Coverage</p> <p>The modelling should consider the impacts of emissions reduction scenarios to 2030. The proposed coverage of the modelling is outlined below. The level of regional and industry breakdowns will be finalised in consultation with the consultant engaged.</p> <p>Proposed coverage</p> <p>Key outputs</p> <p>Changes to:</p> <ul style="list-style-type: none"> • GNI, GDP, GSP, GRP and private consumption • Production and export volumes • Export earnings • Employment <p>Regions</p> <ul style="list-style-type: none"> • National • State • Selected SA4s for relevant regions, with metropolitan SA4s aggregated up (a total of around 20-25 regions nationwide) <p>Resources and mineral manufacturing sectors</p> <ul style="list-style-type: none"> • Mineral and petroleum extraction, based on broad industry groupings: <ul style="list-style-type: none"> ○ Coal ○ Oil and gas ○ Iron ore ○ Aluminium/alumina/bauxite ○ Other energy ○ Other non-ferrous metals • Mineral and petroleum manufacturing • Mining support services <p>2.2 Scenarios</p> <p>A number of emissions reduction scenarios should be modelled to examine the impact of a 45 per cent commitment to emissions reductions in Australia, and a 50 per cent RET, relative to a reference scenario.</p> <p>Reference scenario:</p> <p>The reference scenario should reflect the Department of the Environment and Energy's annual Australian emissions projections as its 2030 baseline and the current set of policies that have been committed to or announced continues to 2030¹ for other countries.</p>		

	<p>Alternative emissions reduction scenarios:</p> <p>The emissions reduction scenarios should reflect a 45% reduction on 2005 levels and consider alternative policy options for Australia:</p> <ul style="list-style-type: none"> • Emissions reductions with and without EITE • Emissions reductions with and without international permit trading, where: <ul style="list-style-type: none"> ○ Emissions reductions are achieved with no international permit trading ○ Up to 25% of Australia's emissions reduction target can be met through international permit trading. <p>In total, there are four scenarios to be modelled:</p> <p><i>Scenario 1: 45% reduction by 2030, with 50% RET with no International permit trading (without EITE)</i></p> <p><i>Scenario 2: 45% reduction by 2030, with 50% RET with up to 25% International permit trading (without EITE)</i></p> <p><i>Scenario 3: 45% reduction by 2030, with 50% RET with no International permit trading (with EITE)</i></p> <p><i>Scenario 4: 45% reduction by 2030, with 50% RET with up to 25% International permit trading (with EITE)</i></p> <p>2.3 Assumptions</p> <p>The impact of emissions reductions on the resources and mineral manufacturing sectors will be highly sensitive to the assumptions underpinning the scenarios and model, particularly regarding emissions reduction policies, which would be a key driver of whether and to what extent the resources sectors would contribute to, and be impacted by, national emissions reductions.</p> <p>Key assumptions to be considered are set out below:</p> <p>Emissions reduction policies:</p> <p>Other current federal and state policies should be taken into account. Beyond existing policies, the key driver of emissions reductions will be through a carbon price.</p> <p>Details of the carbon price policy mechanism will be developed in consultation with the modelling provider</p>
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¹ Current and expected policies could be informed by Paris Agreement commitments, including recent developments, or the 2018 IEA World Energy Outlook (WEO) New Policy Scenario. The WEO provides projections to 2040.

	<p>Other parameters:</p> <ul style="list-style-type: none"> • Technological developments (falling cost of low emission technologies in the energy sector and technological change in other sectors). • Economic parameters: GDP growth, population growth, exchange rates, commodity prices, resources and minerals manufacturing output. These should be consistent with official government projections. • Structural assumptions: Producers behave rationally, producers face lags in adjustment times due to high capital costs, entry to market is constrained by high capital costs. • Electricity sector: Assumptions regarding the electricity sector, such as generation mix, costs, closures and prices should be made transparent.
Deliverables	<ol style="list-style-type: none"> 1. Draft scenarios, assumptions and methodology (with full disclosure of parameters, elasticities, functional forms, cost shares and details of the calibration methodology) 2. Brief interim report (results in table and charts, brief written summary outlining methodology and assumptions) 3. A presentation on the modelling results 4. Final written report
Required skills and experience / Selection Criteria	<p>Required skills of the consultant include</p> <ol style="list-style-type: none"> a) Experience in applied computable general equilibrium (CGE) modelling b) Experience in applying CGE modelling at the global, national, State and Territory and regional levels c) Experience in modelling impacts of carbon pricing and emissions reduction policies d) Experience in analysis of the mining and resources sector e) Proven ability to deliver and communicate results of economic analysis to a variety of stakeholders
Key Performance Indicators	<p>Key Performance Indicators include</p> <ol style="list-style-type: none"> a) Meets the required deliverables within the agreed upon timeframes, expectations and standards b) Responds within expected timeframes to feedback and questions resulting from Departmental review of the work
Fee Structure	<p>Services are to be quoted on the basis of:</p> <p>Flat fee structure based on Deliverables listed in this request for quote</p> <p>Please note that the quoted fees:</p> <ul style="list-style-type: none"> • can be lower than, but must not exceed the Rates listed in Schedule 7 of the Deed of Standing Offer; and • should be commensurate with the resource being offered and the required skills and experience.
Timetable for Services	<p>Mid January 2019</p> <p>Select successful consultant and sign contract.</p> <p>Scoping meeting with the Department.</p>

	<p>15 February 2019</p> <p>Consultants to provide the Department with draft scenarios, assumptions and methodology (with full disclosure of parameters, elasticities, functional forms, cost shares and details of the calibration methodology) for review.</p> <p>Department to confirm assumptions and methodology in consultation with stakeholders.</p> <p>15 March 2019</p> <p>Consultants to provide brief interim report (results in table and charts, brief written summary outlining methodology and assumptions).</p> <p>Consultants provide presentation on results.</p> <p>Department to provide feedback, in consultation with stakeholders.</p> <p>31 March 2019</p> <p>Final written report provided to the Department.</p>
<p>Security clearance</p>	<p>Baseline security clearance required.</p> <p>IMPORTANT: Where the need for a security clearance has been identified (as above), the Commonwealth requires all Specified Personnel to undergo a security clearance. In this instance, Specified Personnel must have completed and submitted a security pack to the Australian Government Security Vetting Agency prior to commencement.</p> <p>The Commonwealth requires all Specified Personnel to undergo Work, Health and Safety and Security Awareness training. This training must be undertaken immediately upon commencement of work with the Commonwealth, before the delivery of any Services. Training is by means of online courses and questionnaires that can be undertaken at Commonwealth premises.</p>
<p>Contact Officer</p>	<p>s22 [REDACTED]</p> <p>s22 [REDACTED]</p>